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INTEGRATING INTELLECTUAL PROPERTY RIGHTS INTO ISLAMIC FINANCE: OPPORTUNITIES AND REGULATORY CHALLENGES

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ABSTRACT

This study explores the conceptual and regulatory integration of intellectual property rights (IPR) into Islamic finance. This research looks at how Intellectual Property Rights (IPR) can fit into Islamic finance by using a method that combines legal and conceptual analysis, focusing on how things like copyrights, patents, and trademarks can be accepted under Shariah law. The findings underscore that IPR can be classified as māl mutaqawwam legally recognized property under Islamic law—thus qualifying as eligible collateral and investment objects in contracts such as mudarabah, sukuk, and ijarah. The study highlights opportunities in Islamic fintech, halal innovation, and IP-based financial instruments, particularly for startups and small and medium-sized enterprises (SMEs). Challenges persist in valuation methodologies, Shariah compliance assurance, and regulatory harmonization between positive law and fiqh muamalah. Based on the literature, case studies, and global best practices (e.g., Malaysia and UAE), the study recommends a hybrid regulatory model aligned with maqāṣid al-sharīʿah and calls for thematic fatwas, Shariah-compliant valuation tools, and cross-sectoral collaboration. This research contributes to the development of a sustainable and inclusive Islamic financial system centered on knowledge-based economies.

KEYWORDS: Islamic Finance, Intellectual Property, Shariah Compliance, Māl Mutaqawwam, Regulatory Framework.

1. INTRODUCTION

Islamic finance has grown significantly as a viable alternative to conventional financial systems, grounded in core Shariah principles such as the prohibition of interest (riba), excessive uncertainty (gharar), and unethical practices (Alam et al., 2017). In this evolving context, innovative approaches are urgently needed to expand the reach of financing mechanisms that align with Islamic legal values. One such opportunity lies in the realm of Intellectual Property Rights (IPR) intangible assets that now play a central role in driving innovation and economic growth in today's knowledge-based economy (Abou Naja, 2024). Despite their relevance, the integration of intellectual property rights (IPR) into Islamic finance remains relatively underexplored, presenting both promising opportunities and unresolved challenges. Leveraging IPR for Islamic financial instruments opens new doors for intangible asset-based financing, offering Shariah-compliant alternatives for both investment and risk management (Dosso & Vezzani, 2017). This is particularly relevant in responding to the rapid development of digital technology and the increasing importance of innovation in the global economy. Among the most promising instruments is the mudarabah contract a profit-sharing partnership model where IPR can serve as either a capital contribution or the object of investment (Adam, 2022). This model could form the basis for developing Islamic financial products that are rooted in IPR. Likewise, musharakah, with its emphasis on risk-sharing and equitable profit distribution, complements the nature of IPR-based investments, which are often high-risk and value-volatile assets (Irawan, 2023; Salman, 2023). Together, these structures demonstrate the adaptability of Islamic finance to support innovative and non-tangible asset classes. IPR, as a high-value asset, also holds potential as collateral in Shariah-compliant financing provided the transaction steers clear of riba and gharar (Alamad, 2019). This creates new pathways for innovators and technology-based entrepreneurs to access much-needed capital. Countries with advanced Islamic finance ecosystems, such as the United Arab Emirates and Malaysia, have started exploring the use of IPR in Islamic financial instruments (Naim, 2020). Such initiatives point to the potential of expanding Islamic finance into more modern and innovation-driven applications. Moreover, IPR-based financial structures could help strengthen innovation ecosystems in developing countries by promoting IP protection while facilitating market access through Shariah-compatible financing (Nidaussalam, 2016). This enables a meaningful collaboration between IP holders and Islamic financial institutions. The issue of IPR valuation is a crucial aspect that ensures justice and transparency in Islamic financing. Accurate valuation methods are essential to avoid excessive uncertainty or gharar in financial transactions (Margono, 2024a). Given the inherent risks of IPR investments, there is a pressing need to develop Shariah-compliant risk management frameworks that address value fluctuations and legal ambiguity (Al Rahahleh et al., 2019). This aligns with broader regulatory and governance efforts within Islamic finance. The fundamental prohibition of riba in Islamic finance has long encouraged the creation of financial instruments that steer away from interest-based or speculative models (Alam et al., 2017). Integrating IPR offers fertile ground for applying these principles through intangible assets whose value is more fluid and innovation-driven. As IPR becomes increasingly significant in the global economy, it demands a deeper understanding of how such assets can be accommodated within Islamic financial structures—particularly concerning valuation and risk dimensions (Abou Naja, 2024). Ultimately, beyond being a source of economic value, IPR also acts as a catalyst for innovation—directly contributing to the sustainability and ethical growth of Shariah-based economies (Dosso & Vezzani, 2017). Its integration into Islamic finance has the potential to enhance financial inclusion, particularly for those in the technology and creative sectors. The inherent legal uncertainty (gharar) found in IPR-based financial transactions calls for a Shariah approach that is both responsive and adaptive ensuring not only the protection of investments but also fairness among all parties involved (Margono, 2024a). To achieve this, a synergy between conventional and Islamic legal frameworks is essential. Previous studies have emphasized the immense potential of mudarabah-based financial models in the context of intellectual property, highlighting how they can create meaningful synergy between intellectual capital and financial capital within Islamic finance systems (Adam, 2022; Nidaussalam, 2016). Utilizing IPR as an asset in Shariah-compliant financing can enhance access to capital for small and medium-sized enterprises (SMEs) with innovative capabilities, while simultaneously supporting the growth of tech-driven startup ecosystems (Naim, 2023). This approach represents a strategic pathway toward the advancement of modern Islamic economics. Countries operating under Islamic legal jurisdictions have started adopting specific regulations to accommodate the use of IPR in financial products—

thereby encouraging Shariah-aligned technological investment and innovation (Mukhtar, 2018). Such policy developments also contribute to strengthening national economic competitiveness. Furthermore, integrating IPR into Islamic finance opens up opportunities to diversify financial products and services in ways that are innovative and Shariah-compliant. Examples include asset-backed sukuk based on IPR and various partnership-based financing schemes that follow profit-sharing principles (Nugroho et al., 2024; Salman, 2023). The risk-sharing philosophy at the heart of Islamic finance is particularly well-suited for managing the inherent risks of IPR-based investments, providing mechanisms to mitigate the failure of innovation projects in a just and proportionate manner (Al Rahahleh et al., 2019). Equally important is the development of market-based IP valuation methodologies that adhere to Shariah principles. Accurate and fair valuation is essential to ensure that contracts reflect equity and transparency—avoiding excessive uncertainty that would otherwise violate the principle of gharar (Lagrost et al., 2010; Margono, 2024).

2. LITERATURE REVIEW

Achieving regulatory harmony between intellectual property law and Shariah principles remains one of the most critical challenges in integrating intellectual property rights (IPR) into Islamic finance. The two frameworks—secular and religious—are rooted in fundamentally different legal philosophies and objectives (Bouheraoua et al., 2015). A suitable regulatory environment must be carefully designed to reconcile these differences without compromising either side. One of the most pressing issues is managing gharar—uncertainty surrounding the valuation and ownership of IPR—which calls for clear regulations and robust legal safeguards to ensure that financial transactions remain in line with Islamic finance ethics (Alam et al., 2017). In practice, jurisdictions that operate within an Islamic legal framework often face difficulties when attempting to bridge conventional IP regulations with Shariah requirements—especially in matters of ownership rights and transferability (Mukhtar, 2018). The treatment of IPR as transferable financial assets must avoid elements of interest (riba) or speculation that could unfairly benefit one party over another (Naim, 2023). Coordinated oversight from capital market authorities, Islamic financial institutions, and national IP agencies is essential to establish standardized procedures and supervisory mechanisms for IP-based financial transactions (Nidaussalam, 2016). Disclosure and reporting mechanisms must also be adapted to conform to Shariah principles, thereby reducing contractual uncertainty and strengthening investor trust (Margono, 2024a). Regulations must also support the proper structuring of mudarabah and musharakah contracts both of which are core financing tools for IPR-based investments ensuring that all elements of the contract meet the legal and ethical requirements of Shariah (Adam, 2022). IPR-backed investments may give rise to legal disputes regarding valuation or asset governance, underscoring the need for Shariah-compliant mediation and arbitration systems (Al Rahahleh et al., 2019). Another challenge is the adaptation of banking and Islamic financial systems to digital environments, as most IP assets today are intangible and technologically rooted (Lu, Verheyen, & Perera, 2009). Cross-border cooperation and harmonized international standards are therefore critical to facilitating fair and Shariah-aligned investment flows in this space (Abou Naja, 2024). Valuation of IPR is a critical process in Islamic finance. The methods must be both market-accepted and Shariah-compliant to avoid value ambiguity that could lead to gharar (Margono, 2024a). While traditional approaches like cost, market, and income-based valuation are common, Islamic finance requires adapted models that also factor in prohibitions against riba and speculation (Dosso & Vezzani, 2017). Regular audits must be conducted for IP used as collateral to validate ownership status and ensure sustained asset value (Mukhtar, 2018). Any collateralization mechanism in IPR-based Islamic finance must avoid interest-bearing penalties or fees. Instead, it should be anchored in risk-sharing and fair outcome principles (Adam, 2022). Emerging technologies such as blockchain and smart contracts can enhance transparency and operational efficiency in IP collateral management while reducing the likelihood of legal disputes (Nidaussalam, 2016). Independent third-party auditors familiar with both Shariah financial ethics and the technical nature of intangible assets are vital for effective IPR risk management (Al Rahahleh et al., 2019). Engaging the Shariah Supervisory Board in the auditing and valuation process is essential to ensure every transaction complies with Islamic legal standards (Naim, 2023). In practice, IPR used as collateral should be supported by legally robust documentation and a transparent transfer mechanism to prevent future legal complications (Mukhtar, 2018). Conservative approaches in valuation and auditing can help mitigate the risk of overvaluation, which could endanger the stability of

Islamic financial institutions (Margono, 2024a). Furthermore, developing a technical framework for IPR audit, valuation, and collateralization in Islamic finance requires collaborative research among academics, Shariah scholars, and financial regulators (Abou Naja, 2024). This article aims to offer a comprehensive view of how IPR can be integrated into Islamic financial systems, spotlighting both the emerging opportunities and the regulatory challenges stakeholders must address (Adam, 2022). The main focus is the design of Shariah-compliant financial instruments based on IPR, which not only adhere to Islamic legal norms but also promote financial inclusion and innovation-led growth (Nidaussalam, 2016). The analysis also reviews existing regulatory frameworks to identify key areas where Islamic and conventional legal systems can be further harmonized to support the sector's long-term development (Mukhtar, 2018). Ultimately, this research aims to propose actionable policy recommendations and best practices that can be adopted by regulators, Islamic financial institutions, and industry players to ensure a smooth and sustainable integration of IPR. As such, it serves as a foundational reference for scholars and practitioners exploring the future of modern Islamic finance and IP-based financing models that align with Shariah principles and global economic trends (Margono, 2024a; Abou Naja, 2024).

3. METHODOLOGY

3.1 Research Approach

This study adopts a qualitative-descriptive approach, utilizing both normative legal analysis and a conceptual framework (commonly known as conceptual and normative legal research). This methodology was chosen to enable a comprehensive exploration of the applicable legal principles, Islamic jurisprudence (fiqh), and relevant theories in Islamic economic law—particularly about the integration of Intellectual Property Rights (IPR) into Islamic financial systems.

3.2. Types and Sources of Data

The research primarily relies on secondary data, categorized into three main types:

- Primary legal sources, including national regulations related to IPR and Islamic finance such as the Indonesian Intellectual Property Law, Islamic Banking Law, fatwas issued by the National Shariah Council–Majelis Ulama Indonesia (DSN-MUI), and regulatory instruments from Bank Indonesia and the Financial Services Authority (OJK).
- Secondary legal sources, consisting of academic literature, peer-reviewed journal articles, reference books, and official publications from international organizations such as the World Intellectual Property Organization (WIPO), the Organisation of Islamic Cooperation (OIC), and the Islamic Financial Services Board (IFSB).
- Tertiary sources, such as legal encyclopedias, Islamic legal dictionaries, and bibliographic indexes relevant to IPR and Islamic economic law.

3.3. Data Collection Techniques

Data were gathered through:

- An extensive literature review of legal texts, scholarly publications, and academic journals;
- Detailed analysis of relevant fatwas and Shariah regulations governing Islamic banking and intangible assets in Indonesia and other Islamic jurisdictions;
- A comprehensive review of international legal documents and policy papers from institutions such as WIPO, the Islamic Development Bank (IDB), and the IFSB.

3.4. Data Analysis Techniques

The data were examined using the following analytical methods:

- Normative legal analysis, which involves interpreting statutory texts and Shariah rulings (fatwas) through the lens of Islamic legal principles;
- Thematic content analysis, which identifies recurring themes in literature addressing the relationship between IPR and Islamic finance, such as the Shariah validity of IPR, its potential as collateral (Rahn), and associated regulatory challenges;
- Comparative legal analysis, which explores the similarities and differences between conventional legal frameworks and Islamic jurisprudence in the regulation of IPR as an economic asset.

4. RESULTS AND DISCUSSION

Intellectual Property Rights (IPR) represent a significant category of intangible assets, particularly relevant in today's digital economy. As noted by Razaq and Sadeq (2019), key Shariah principles—such as justice (ʻadl), public benefit (maṣlaḥah), and the protection of wealth (ḥifẓ al-māl)—normatively support the legitimacy of utilizing IPR in Islamic financing frameworks. Reda (2017) similarly emphasizes that there is no explicit prohibition in Islamic law regarding the ownership or transaction of IPR, so long as the transaction remains free from gharar (excessive uncertainty), riba (interest), or maysir (gambling). Building on this, Rehman (2024) and Rognstad & Ørstavik (2021) underline the strategic role of IPR in supporting sustainable financing rooted in maqāṣid al-sharīʿah and aligned with the Sustainable Development Goals (SDGs). The protection of halal digital innovation, Islamic educational technology, and socially oriented Shariah-based applications aligns directly with core maqāṣid such as the preservation of intellect (ḥifẓ al-ʻaql), wealth (ḥifẓ al-māl), and religion (ḥifẓ al-dīn). One of the most intricate challenges in IP-based Islamic finance lies in valuation. As Ryan (2020) points out, determining the economic value of IPR remains complex. Commonly used conventional methods such as the income, market, and cost-based approaches—must be adapted to comply with Islamic principles, which emphasize clarity, equitable risk-sharing, and Shariah accountability. Without a well-defined, Shariah-aligned valuation framework, the risks of speculation and contractual imbalance increase significantly. Therefore, the development of valuation standards grounded in fiqh muamalah is essential. In terms of contract structuring, scholars like Sapuan (2016) and Dewaya (2024) have proposed innovative uses of IPR as capital contributions in mudarabah contracts. For instance, an IP owner might contribute the copyright to a halal software product, while a financial partner provides working capital. Profits are then shared based on the agreed terms and proportional contribution. According to the Securities Commission Malaysia (2022), the Shariah Supervisory Board plays a vital role in evaluating the compliance of IP-based financial instruments. However, there is still a noticeable absence of specific fatwas or international standards governing the use and valuation of IPR as an underlying asset in Islamic banking. Findings from this research suggest that integrating IPR into Islamic finance holds significant strategic potential for advancing innovation in Sharia-compliant financial products (Naim & Kasri, 2025; Reda, 2017). This approach offers a new dimension of value to intangible assets that have long been underutilized within Islamic economic frameworks (Margono, 2024a). The use of contracts such as mudarabah and musharakah makes it possible to monetize IPR in ways that respect Islamic legal and ethical principles (Sapuan, 2016; Nidaussalam, 2016). IPR valuation remains a critical focus in aligning intangible assets with Islamic financing. Ensuring that financing mechanisms are fair, transparent, and grounded in legitimate valuation practices is essential for the sustainability of innovations like IPR-backed sukuk and IP-collateralized instruments (Margono, 2024b; Ryan, 2020; Dosso & Vezzani, 2017). Objective and transparent valuation models are indispensable for maintaining Shariah compliance and investor confidence in these products (Rachman et al., 2023). To contextualize these findings, the following section presents a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis of the integration of IPR into Islamic finance offering a practical overview of the strategic landscape and the challenges ahead in building a Shariah-aligned IPR financing ecosystem.

Table 1: Opportunities and Challenges of Integration of Intellectual Property Rights (IPR) In Islamic Finance.

Aspect	Opportunity	Challenge
Recognition of the Legality of Intellectual Property Rights Assets in Sharia	Promote collective fatwa and legal basis for intangible assets.	There are still differences of opinion among scholars regarding ownership of intangible assets.
Digitalization of Islamic Financial Products	Memungkinkan perlindungan HKI pada platform digital seperti fintech syariah.	Enables IPR protection on digital platforms such as Sharia fintech.
Potential for Commercialization of IPR (e.g. sukuk patent license)	Making patents and copyrights into liquid assets that can be traded.	Risk of monopoly or gharar if IPR is misused.
Collaboration of Financial Authorities and Sharia Regulators	Policy synchronization between the National Sharia Council-Indonesian Ulema Council, Financial Services Authority, and the Ministry of Law.	The gap in understanding of IPR law between sharia authorities and the state.
Intellectual Property Rights Awareness and Literacy in the Islamic Finance Industry	Improving the understanding of IPR among academics and sharia practitioners.	The low level of IPR socialization in the Islamic economics curriculum.
Harmonization of National Regulations and Sharia Principles	Forming national hybrid regulations based on maqashid sharia.	Potential overlapping regulations between the Intellectual Property Rights Law and fiqh muamalah law.
Sharia Open Source-Based Product Development	Reducing licensing costs with a halal open licensing model.	Need for halal validation and ethical oversight of open source models.
Economic Incentives for Sharia-Based Innovation	Encourage Sharia-based research and innovation from the public and private sectors.	The absence of a specific fiscal incentive scheme for IPR-based Sharia innovation.

Literatur Contemporary Islamic legal scholarship increasingly recognizes intellectual property (IP) such as patents, copyrights, and trademarks as economically valuable and legally valid assets. Reda (2017) and Ratnawati & Al Farizi (2023) affirm that IP can be classified as māl mutaqawwam, which means an asset that is legally tradable under Islamic law, provided it is free from elements of gharar (excessive uncertainty) or riba (interest). This classification opens meaningful legal pathways for IP to be incorporated into various Shariah-compliant financial contracts, including rahn (collateral), ijarah (leasing), sukuk (Islamic bonds), and musyarakah (equity partnerships). The digital economy has further expanded the spectrum of intangible IP-based assets, particularly in areas such as halal software, Shariah-compliant artificial intelligence (AI), and Islamic financial technology (fintech) applications for zakat and waqf. Naim (2024) notes that these developments generate fresh financing opportunities for the halal tech sector, including royalty-based monetization of Islamic software and licensing of AI algorithms grounded in Islamic jurisprudence. Models like royalty-based sukuk and ijarah contracts for Islamic software present exciting possibilities for innovative, Shariah-aligned financing instruments. One of the key challenges in integrating IP into Islamic finance lies in valuation. Ryan (2020) and Rachman et al. (2023) underscore the importance of applying valuation methods aligned with Shariah principles, such as the income approach, market approach, and cost-based approach. Accurate valuation is critical to ensure IP's viability as an underlying asset in innovative sukuk or tech-based musyarakah. Heba A. Raslan (2007) and Price (2009) reveal that although many Muslim-majority countries have adopted modern IP legal frameworks, regulatory gaps remain between statutory law and the principles of fiqh muamalah. Egypt, for example, recognizes patents and copyrights legally, but they have not yet been fully utilized in Shariah-based financial transactions. Therefore, there is a pressing need for thematic fatwas, standardized valuation guidelines, and regulatory sandboxes specifically tailored for IP-based Islamic finance. The use of IP in Islamic finance also aligns closely with the objectives of maqāṣid al-sharīʿah, particularly in protecting intellect (ḥifẓ al-ʻaql) and wealth (ḥifẓ al-māl). Rognstad & Ørstavik (2021) assert that incorporating IP into sustainable finance instruments strengthens ESG (Environmental, Social, and Governance) initiatives within an Islamic context. Financially supporting protected halal innovations contributes to a more equitable and inclusive economy. Sapuan (2016) proposes an adaptive mudaraba model where IP can serve as intangible capital, co-invested with financial capital from investors. This model is particularly relevant for financing Shariah-compliant tech startups, digital zakat platforms, and Islamic fintech ventures. Practical applications might include mudaraba contracts based on AI-driven Qur'an education tools or musyarakah agreements involving copyright owners of digital waqf apps and Islamic fintech investors. Contemporary fiqh literature confirms that IP including trademarks, copyrights, and patents is recognized as legitimate property under Islamic law. Studies by Mukhtar (2018), Reda (2017), and Heba A. Raslan (2007) establish that IP meets the criteria of māl mutaqawwam, which permits its trade and utilization within Shariah-compliant transactions. This legal endorsement opens new possibilities for structuring financial contracts such as rahn, ijarah, sukuk, and mudaraba using IP assets. One of the biggest implementation hurdles remains IP valuation. Margono (2024) and Setiawan & Heriyanto (2024) emphasize the necessity of income-, market-, and cost-based valuation techniques that are adapted to Islamic norms. As long as the asset being traded is transparent and its value clearly defined (ta'yīn), such methods can meet Shariah requirements. These approaches are particularly relevant in transactions like royalty-based sukuk or licensing of Islamic software and Sharia-compliant AI tools. According to Rehman (2024) and Al-Suwailem (2019), the integration of IP into Islamic finance can actively contribute to achieving maqāṣid al-sharīʿah, including the protection of intellect, wealth, and public welfare (maṣlaḥah). Simultaneously, IP can support the Sustainable Development Goals (SDGs), particularly those related to innovation, financial inclusion, and equitable economic growth. Financing models like mudaraba for halal tech startups and royalty-based sukuk offer strategic pathways to foster innovation within an Islamic legal framework. Despite conceptual acceptance, institutional gaps persist in Islamic finance practices. Murat Yaş (2023) (2021) and Azmi & Engku Ali (2007) observe that legal recognition of IP as collateral is inconsistent across Muslim-majority jurisdictions. The absence of specific fatwas, lack of regulatory expertise in IP valuation, and the nonexistence of IP-specific financial sandboxes are key barriers. Elasrag (2019) and Alamad (2019) highlight how technologies like blockchain and AI could offer new avenues for Shariah-compliant IP creation, protection, and financing. Blockchain ensures transparent, tamperproof recording of halal IP ownership, while AI algorithms aligned with Islamic ethics could be licensed under ijarah contracts. Still, Heller (2023) warns about the "tragedy of the anticommons" where fragmented IP ownership hinders economic use emphasizing the need for distributive justice and maṣlaḥah as core design principles. **Integrating IP into Islamic finance is not merely a legal or technical undertaking it has deep implications for fulfilling the overarching goals of Shariah. As outlined by Dusuki & Bouheraoua (2011), IP plays a key role in achieving:**

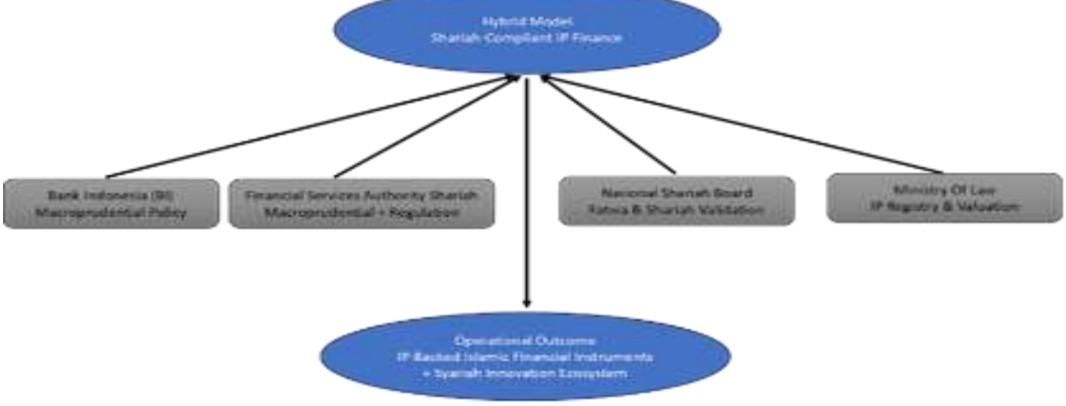
- Hifz al-Māl (protection of wealth): Recognizing IP as legitimate property helps prevent misuse or theft of intangible assets.
- Hifz al-ʻAql (protection of intellect): By assigning economic value to intellectual creations, society rewards innovation and cognitive contribution.
- Hifz al-Dīn (protection of religion): Digital Islamic finance tools can enhance the global dissemination of Islamic principles.

With the world's largest Muslim population, Indonesia holds a strategic position in advancing Shariah-based finance and innovation. As the halal ecosystem and creative economy expand, there's a growing demand to embed intangible assets—such as IP rights within a more inclusive Islamic financial infrastructure. Yet, their systematic implementation in Islamic financial instruments remains limited. A particularly promising avenue is using IP as collateral (Rahn) in Shariah-compliant financing. Under Islamic law, collateral must be māl mutaqawwam. Many contemporary scholars agree that IP fits this category due to its measurable and transferable economic benefits. Given that most of Indonesia's 64 million MSMEs (Kemenkop UKM, 2023) lack fixed collateral, registered trademarks, packaging designs, digital copyrights, and halal patents could serve as viable alternatives. This opens the door for Islamic banks to develop micro-financing schemes secured by IP. For instance, a Muslim fashion brand with a registered trademark could access musyarakah or murabahah financing using the brand as collateral. Indonesia already has a relatively strong IP protection regime under the Directorate General of Intellectual Property, with digital registration and improving administrative processes. Additionally, collaborations between this agency, the National Committee for Islamic Economy and Finance (KNEKS), and the Financial Services Authority (OJK) are beginning to explore IP as financial assets—though not yet explicitly within a Shariah context. This positions Indonesia well to pioneer a Shariah-compliant collateralized IP financing model. Islamic banks could begin leveraging national IP databases to assess the risk and market value of clients' intangible assets. **There is also strong potential for synergy among regulators and Shariah financial authorities. Key stakeholders such as OJK Syariah, DSN-MUI, and the IP Office—could collaborate to:**

1. Issue fatwas and guidelines for using IP as collateral in Shariah contracts.
2. Establish Shariah-compliant valuation parameters for IP.
3. Promote IP literacy among Islamic finance practitioners and halal entrepreneurs.

These efforts would bridge the gap between positive law (e.g., Indonesia's Copyright Law No. 28 of 2014 and Trademark Law No. 20 of 2016) and contemporary fiqh muamalah. With a robust legal framework, a large Shariah financial market, and aligned financial and religious institutions, Indonesia has the necessary ingredients to become a global model for IP-integrated Islamic finance. What remains is strong policy direction and regulatory harmony to develop a system that is not only inclusive but also respectful and protective of the ummah's intellectual wealth.

Chart 1: IPR Integration Strategy in Islamic Finance in Indonesia.



Shariah-compliant IPR Finance is a financing approach in Islamic finance that integrates Intellectual Property Rights (IPR) as a legitimate asset in the structure of Islamic contracts, by the principles of fiqh muamalah and maqāṣid al-sharīʿah.

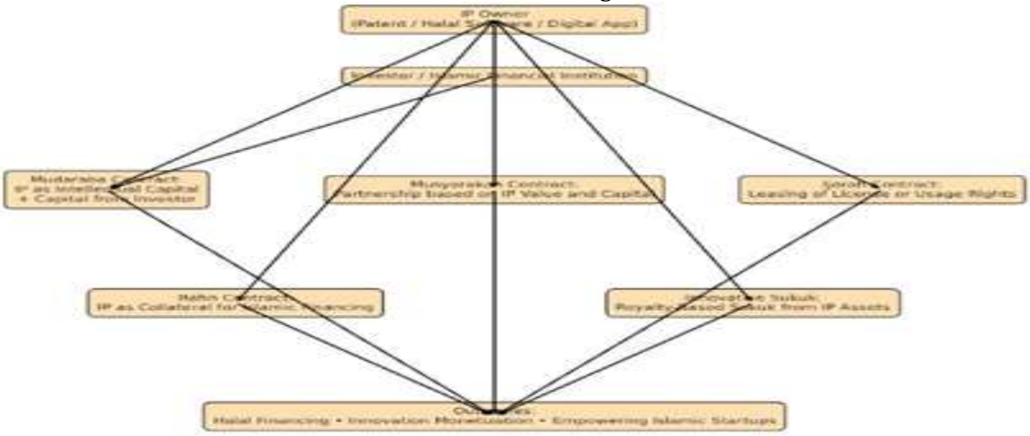
This opens up great opportunities for innovative financing based on intangible assets such as patents, trademarks, and copyrights. The main characteristics of Shariah-compliant IPR Finance can be seen in the table below:

Table. 2: Main Characteristics of Shariah-Compliant IPR Finance.

ASPECT	EXPLANATION
Financing Object	IPR assets such as copyright, patents, trademarks, industrial designs
Sharia Contracts Used	*Murabahah*, *Musyarakah*, *Ijarah*, *Wakalah*, *Rahn*
Sharia Values	By the principles of justice, legal ownership, free from Riba and Gharar
Validation	Requires a fatwa or ijtihad of scholars regarding the status of IPR as māl mutaqawwam
Implementation	Creative SME financing, sharia fintech, royalty-based sukuk, halal license

The contract model in Sharia financing can be seen in the following chart:

Chart 2: Sharia Financial Financing Contract Model.



4.1. Comparative Insights and Best Practices for Integrating Intellectual Property into Global Islamic Finance

Across the globe, there's a growing trend of leveraging intellectual property (IP) as collateral in innovative financing schemes. According to Liu, Peng, and Zhang (2022), countries like South Korea, Singapore, and the United States have already adopted IP-backed financing mechanisms through specialized tech finance agencies and innovation banks. While these systems largely function within conventional legal frameworks, many of their foundational principles can be adapted to align with Islamic financial practices. As Bouheraoua et al. (2015) emphasize, ensuring the clarity of contractual terms (ta'yīn) and the intrinsic value of the IP asset is crucial for Shariah-compliant transactions.

From an Islamic perspective, the permissibility of using IP as collateral has been critically examined. Kasim et al. (2009) highlight the need for Shariah assurance in financial products—particularly when involving intangible assets. This conceptual alignment has been translated into pragmatic applications in jurisdictions like the United Kingdom, where the Islamic finance sector continues to grow within a legal ecosystem that recognizes IP as a legitimate business instrument (Farooq & El Ghattis, 2015).

Scholars such as Malkawi (2013) and Ratnawati & Al Farizi (2023) underscore the importance of harmonizing Islamic legal principles with international intellectual property frameworks. While global institutions like WIPO and the WTO present normative challenges, these can be reconciled through the lens of maqāṣid al-sharīʿah—emphasizing the protection of wealth (ḥifẓ al-māl), intellect (ḥifẓ al-'aql), and innovation. Integrating IP into Islamic finance requires robust and Shariah-aligned valuation methodologies. Both Margono (2024b) and Lagrost et al. (2010) call attention to the essential role of Shariah-certified professional valuers in preventing asset mispricing or manipulation, particularly within sukuk or ijarah structures where IP value directly impacts returns.

To ensure compliance, valuation techniques—especially income and market approaches—must be calibrated to uphold transparency and avoid speculation, which Islam prohibits. Despite the promise, challenges persist: there is still a shortage of thematic fatwas, a lack of institutional capacity to perform reliable IP valuations, and hesitance among regulators about recognizing intangible assets as fully Shariah-compliant.

Yet, the innovation potential is immense—especially as ESG frameworks, the halal digital industry, and AI-powered economies continue to evolve. As Nethercott & Eisenberg (2020) argue, the Islamic legal system must adopt a more adaptive and forward-looking posture to accommodate the realities of the digital economy, without compromising on the core values of Shariah.

In this era of digital transformation and knowledge-based economies, IP has become a cornerstone of modern economic value. However, its full integration into Islamic finance systems remains in its formative stages. Some countries have pioneered best practices for embedding IP within Islamic contracts, while others are still navigating gaps in regulation, religious rulings, or institutional infrastructure.

Encouragingly, the discussion reveals ongoing efforts to align Shariah principles with IP regulations—particularly in Muslim-majority nations like Egypt, Malaysia, and across the Gulf Cooperation Council (GCC) states (Heba A. Raslan, 2007; Mukhtar, 2018; Naim, 2020). These developments reflect a growing commitment to protect IP in line with maqāṣid al-sharīʿah, without sidelining national legal systems. This progress also affirms the possibility of designing Islamic financial instruments that empower innovation, protect rights, and promote ethical economic participation (Mohamad Yunus, 2019).

Table 3: Comparative Practices among Nations in Integrating Intellectual Property into Islamic Finance.

Country/Institution	IPR Innovation in Islamic Finance	Integration Model	Sharia Support
Malaysia	IPR as collateral in financing MSMEs and Sharia fintech	integrated regulation BNM + MyIPO + SAC	SAC-BNM Fatwa and recognition of IPR-based Sharia contracts
Uni Emirat Arab (UEA)	IP-based Fintech Sandbox (blockchain zakat, halal robo-advisors)	Regulatory sandbox DIFC & UAE IP Authority	Shariah-compliant framework DIFC Sandbox
Indonesia	The digital halal license pilot project; does not explicitly recognize IPR as a guarantee.	OJK + DJKI + Ministry of Religion (partial)	MUI fatwa is not yet explicit regarding IPR
Arab Saudi	Halal license and patent for Hajj & Umrah tech sector	GAC + SAMA	Sharia-licensed leasing agreement; supported by a local fatwa
Turki	IPR-based halal certification for local financial products	TKBB + National Intellectual Property Authority	Supported by the Turkish Ulema Council (Diyanet)
Qatar	Sharia digital banking with UI design protection and patent algorithm	QFC + HKI licensing framework	Directed by Maqasid Sharia
Pakistan	Halal brand protection; IPR-based digital zakat application	SBP + Ministry of IP	SBP fatwa on intangible asset
Brunei Darussalam	Sharia microfinance based on copyright and design	Islamic Bank of Brunei + National Sharia Institution	Local regulation based on maqasid
WIPO (Global)	IPR-based financing toolkit; not specifically for Sharia	Global HKI finance framework	Not yet adjusted to Sharia principles

Based on the comparative table above, it becomes clear that Malaysia and the United Arab Emirates (UAE) are at the forefront when it comes to the formal and operational recognition of intellectual property (IP) within Islamic finance systems. Both countries have successfully integrated IP into their financial frameworks, supported by clear regulatory policies and authoritative fatwas. Indonesia, Pakistan, and Qatar are making notable progress but still face challenges in areas such as regulatory harmonization and the issuance of Shariah-compliant fatwas. Meanwhile, Turkey and Saudi Arabia tend to apply IP more selectively, particularly in niche areas like halal certification and religious technology, often backed by localized fatwas.

On a broader scale, international institutions like WIPO (World Intellectual Property Organization) offer robust IP frameworks. However, these frameworks have yet to be tailored specifically to the nuances and requirements of Islamic finance. This presents an opportunity for adaptation and integration. From a global perspective, the integration of IP into Islamic finance is not only feasible—it is also strategically valuable. It holds tremendous potential for driving halal innovation and promoting financial inclusion. Countries like Malaysia and the UAE have already demonstrated that with harmonized legal infrastructure and strong Shariah oversight, IP can be effectively utilized as a legitimate asset in Shariah-compliant financing.

At the same time, other nations are beginning to move in this direction, whether through regulatory sandboxes, institutional strengthening, or the development of IP-based halal certification mechanisms. These early-stage initiatives reflect a growing awareness of IP's relevance in modern Islamic finance. In summary, global best practices reveal that the successful integration of IP into Islamic finance depends on three core pillars:

1. A solid legal and cross-sector regulatory foundation,
2. Active support from Shariah authorities through contemporary fatwas and ijtihad, and
3. Adoption of technology and alignment with international standards, such as those from WIPO and TRIPS

5. CONCLUSION

The integration of intellectual property rights (IPR) into Islamic finance presents a promising yet underexplored domain for Shariah-compliant innovation. This research confirms that IPR, when interpreted as māl mutaqawwam, can serve as legitimate economic assets within Islamic jurisprudence, enabling the use of IPR in financing models such as rahn, sukuk, mudarabah, and ijarah. Empirical and doctrinal evidence supports the alignment of IP-based instruments with both Shariah principles and economic justice. The main strategic advantages of integrating IPR include enhanced access to financing for halal creative industries, monetization opportunities for Islamic fintech assets, and broader financial inclusion of microenterprises through IP-backed collateral. However, challenges such as valuation uncertainty (gharar), lack of thematic fatwas, and insufficient regulatory synchronization need to be addressed through a proactive policy framework. Global experiences—especially in Malaysia, UAE, and Turkey—demonstrate the feasibility of operationalizing Sharia-compliant IP finance through sandbox mechanisms, regulatory convergence, and institutional support. The study concludes that Indonesia, given its demographic and legal readiness, is well-positioned to develop a national framework that merges Islamic financial law with intellectual property governance. A hybrid Shariah–civil law model is recommended, supported by regulatory bodies such as OJK, DSN-MUI, and the Ministry of Law and Human Rights.

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